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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,331	10/31/2003	Reid C. Danielson	17310-298007	9674

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EXAMINER

WATKO, JULIE ANNE

ART UNIT PAPER NUMBER

2653

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,331

Applicant(s)

DANIELSON ET AL.

Examiner

Julie Anne Watko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 4-7, 14-21 and 23-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-13 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 4-7, 14-21 and 23-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 19, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 8-13 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Berding (US Pat. No. 5936803).

As recited in claim 1, Berding shows a head suspension for supporting a head slider over a disk surface in a rigid disk drive (see Fig. 1), the head suspension including a load beam 120 having a mounting region (right region in Fig. 4), a rigid region (left region in Fig. 4) and a spring region 122 located between the mounting region and rigid region, the head suspension comprising a shock limiter (including 166) formed of the same piece of material (“thin sheet of stainless steel”, see col. 7, lines 1-3) as the spring region of the load beam, the shock limiter limiting movement of the head suspension away from the disk surface (“tabs or “limiters” 166 that contact the base plate 110 and mechanically limit the movement of the load beam 120 in a direction away from the disk”, see col. 6, lines 63-67) due to impact loading.

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As recited in claim 2, Berding shows that the spring region of the load beam includes an opening 116, and wherein the shock limiter 166 comprises a cantilevered portion formed within the opening (see Fig. 3).

As recited in claim 3, Berding shows that the shock limiter overlaps a portion 110 of the head suspension and the shock limiter contacts the overlapped portion of the head suspension upon movement of the head suspension away from the disk surface ("tabs or "limiters" 166 that contact the base plate 110 and mechanically limit the movement of the load beam 120 in a direction away from the disk", see col. 6, lines 63-67).

As recited in claim 8, Berding shows that the cantilevered portion 165 includes at least one bend (see Fig. 3) creating the overlap (see Fig. 4) with the overlapped portion 110 of the head suspension.

As recited in claim 9, Berding shows that the head suspension includes a base plate 110 attached to the load beam at the mounting region, and the overlapped portion of the head suspension comprises a portion of the base plate (see Figs. 3-4).

As recited in claim 10, Berding shows that the cantilevered portion 165 includes at least one bend (see Fig. 3) creating the overlap (see Fig. 4) with the overlapped portion of the base plate 110.

As recited in claim 11, Berding shows a load beam 120 for a head suspension that supports a head slider 140 over a disk surface in a rigid disk drive (see Fig. 1), the load beam comprising a single piece of material including: a mounting region', a rigid region', a spring region located between the mounting and rigid regions', 25 and a shock limiter (including 166)

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adapted to contact a portion 110 of the head suspension upon movement of the head suspension relative to the disk surface due to impact loading (see col. 6, lines 63-67).

As recited in claim 12, Berding shows that the shock limiter (including 166) limits movement of the rigid region of the load beam away from the disk surface due to impact loading.

As recited in claim 13, Berding shows that the spring region 122 includes an opening 116 and wherein the shock limiter comprises a cantilevered portion 165 formed within the opening.

As recited in claim 22, Berding shows a head suspension for supporting a head slider 140 over a disk surface in a rigid disk drive (see Fig. 1), the head suspension including a load beam 120 having a mounting region (right region in Fig. 4), a rigid region (left region in Fig. 4) and a spring region 122 located between the mounting region and rigid region, the head suspension comprising a shock limiter (including 166) formed of the same piece of material ("thin sheet of stainless steel", see col. 7, lines 1-3) as the spring region of the load beam, the shock limiter including at least one bend (see 165 in Fig. 3) creating an overlap (see 166 in Fig. 4) with a portion 110 of the head suspension to limit movement of the head suspension away from the surface of the disk (see col. 6, lines 63-67).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sony (JP 11-66766) shows a hard disk drive comprising bent shock limiters (see Figs. 8-9). Owe et al (US Pat. No. 5012369) show a head suspension mechanism (see Fig. 2; see also Figs. 5-7).

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Tues. & Thurs. until 9PM, Wed. & Fri. until 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Julie Anne Watko
Primary Examiner
Art Unit 2653

April 5, 2005
JAW

A handwritten signature in dark ink, appearing to be 'JAW', written over a horizontal line.